

IN THE CLAIMS

This listing of the claims will replace all prior listings.

Listing of Claims:

1. (Currently Amended) An information processing apparatus for transmitting information to a transmission party via a network in predetermined units, said information processing apparatus comprising:

a first transmission unit for transmitting first information to said transmission party via said network in said units;

a receiving unit for receiving, from said transmission party, receiving information about the reception of said first information transmitted by said first transmission unit;

a clocking unit for clocking the time from when said first information is transmitted;

a determination unit for determining whether or not the time clocked by said clocking unit exceeds a reference value; and

a second transmission unit for retransmitting said first information when said determination unit determines that the time clocked by said clocking unit does not exceed said reference value and for transmitting second information when said determination unit determines that the time clocked by said clocking unit exceeds said reference value, in a case where said received information received by said receiving unit indicates that said transmission party has not yet received said first information; and

a dividing unit for dividing information of individual first units corresponding to first information and second information into corresponding plurality of individual second units,

wherein,

said first transmission unit and second transmission unit transmit said first information and second information by using corresponding plurality of individual second units.

2. (Previously Presented) An information processing apparatus according to claim 1, wherein said units comprise packets.

3. (Cancelled)

4. (Currently Amended) An information processing apparatus according to claim [[3]] 1, further comprising a setting unit for setting a flag indicating that the time clocked by said clocking unit exceeds said reference value when determined by said determination unit.

5. (Currently Amended) An information processing apparatus according to claim 4, further comprising:

a writing unit for writing said flag into said second information which is transmitted by said second transmission unit when said flag is set by said setting unit; and

a clearing unit for clearing said flag when all of said second packets which form one of said first packets are transmitted to said transmission party.

6. (Currently Amended) An information processing method for use with an information processing apparatus for transmitting information to a transmission party via a network in predetermined units, said information processing method comprising:

a first transmission step of transmitting first information to said transmission party via said network in said units;

a receiving step of receiving, from said transmission party, receiving information about the reception of said first information transmitted in said first transmission step;

a clocking step of clocking the time from when said first information is transmitted;

a determination step of determining whether or not the time clocked in said clocking step exceeds a reference value; and

a second transmission step of retransmitting said first information when said determination step determines that the time clocked in said clocking step does not exceed said reference value and for transmitting second information when said determination step determines that the time clocked in said clocking step exceeds said reference value, in a case where said received information received in said receiving step indicates that said transmission party has not yet received said first information; and

a dividing step of dividing information of individual first units corresponding to first information and second information into corresponding plurality of individual second units,
wherein,

said first transmission unit and second transmission unit transmit said first information and second information by using corresponding plurality of individual second units.

7. (Currently Amended) A recording medium having recorded thereon a computer-readable program in a case where a computer controls an operation of transmitting information to a transmission party via a network in predetermined units, said program comprising:

 a first transmission step of transmitting first information to said transmission party via said network in said units;

 a receiving step of receiving, from said transmission party, receiving information about the reception of said first information transmitted in said first transmission step;

 a clocking step of clocking the time from when said first information is transmitted;

 a determination step of determining whether or not the time clocked in said clocking step exceeds a reference value; and

 a second transmission step of retransmitting said first information when said determination step determines that the time clocked in said clocking step does not exceed said reference value and for transmitting second information when said determination step determines that the time clocked in said clocking step exceeds said reference value, in a case where said received information received in said receiving step indicates that said transmission party has not yet received said first information; and

a dividing step of dividing information of individual first units corresponding to first information and second information into corresponding plurality of individual second units,

wherein,

said first transmission unit and second transmission unit transmit said first information and second information by using corresponding plurality of individual second units.

8. (Currently Amended) A program in a case where a computer controls an operation of transmitting information to a transmission party via a network in predetermined units, said program comprising:

a first transmission step of transmitting first information to said transmission party via said network in said units;

a receiving step of receiving, from said transmission party, receiving information about the reception of said first information transmitted in said first transmission step;

a clocking step of clocking the time from when said first information is transmitted;

a determination step of determining whether or not the time clocked in said clocking step exceeds a reference value; and

a second transmission step of retransmitting said first information when said determination step determines that the time clocked in said clocking step does not exceed said reference value and for transmitting second information when said determination step determines that the time clocked in said clocking step exceeds said reference value, in a case where said received information received in said receiving step indicates that said transmission party has not yet received said first information; and

a dividing step of dividing information of individual first units corresponding to first information and second information into corresponding plurality of individual second units,
wherein,

said first transmission unit and second transmission unit transmit said first information and second information by using corresponding plurality of individual second units.

9. (Currently Amended) An information processing apparatus for receiving information, transmitted via a network, for individual second packets which are created by dividing information of individual first packets which are created by dividing said received information, said information processing apparatus comprising:

a receiving unit for receiving said information transmitted for each of said second packets via said network;

a storage unit for storing, for each of said first corresponding first packets, information for each of said second packets received by said receiving unit;

an assembling unit for assembling information for each of said second packets stored in said storage unit into information for each of said first packets before being divided;

a first deletion unit for deleting each of said second packets, stored in said storage unit, corresponding to said assembled information for each of said second packets when each of said second packets is assembled into said corresponding individual first packets by said assembling unit;

a determination unit for determining whether or not a predetermined flag is contained in the information received by said receiving unit; and

a second deletion unit for deleting said second packet, stored in said storage unit, corresponding to said first packet which is prior to said first packet to which said second packet, in which said flag is contained, corresponds when said determination unit determines that said flag is contained in the information received by said receiving unit.

10. (Currently Amended) An information processing method for use with an information processing apparatus for receiving information, transmitted via a network, for individual second packets which are created by dividing information for individual first packets which are created by dividing said received information, said information processing method comprising:

a receiving step of receiving said information transmitted for each of said second packets via said network;

a storing step of storing, for each of said first corresponding first packets, information for each of said second packets received in said receiving step;

an assembling step of assembling information for each of said second packets, stored in said storing step, into information for each of said first packets before being divided;

a first deletion step of deleting each of said second packets, stored in said storing step, corresponding to said assembled information for each of said second packets when each of said second packets is assembled into said corresponding individual first packets in said assembling step;

a determination step of determining whether or not a predetermined flag is contained in the information received in said receiving step; and

a second deletion step of deleting said second packet, stored in said storing step, corresponding to said first packet which is prior to said first packet to which said second packet, in which said flag is contained, corresponds when said determination step determines that said flag is contained in the information received in said receiving step.

11. (Currently Amended) A recording medium having recorded thereon a computer-readable program for causing a computer to perform an operation of receiving information, transmitted via a network, for individual second packets which are created by dividing information for individual first packets, said program comprising:

a receiving step of receiving said information transmitted for each of said second packets via said network;

a storing step of storing, for each of said first corresponding first packets, information for each of said second packets received in said receiving step;

an assembling step of assembling information for each of said second packets, stored in said storing step, into information for each of said first packets before being divided;

a first deletion step of deleting each of said second packets, stored in said storing step, corresponding to said assembled information for each of said second packets when each of said second packets is assembled into said corresponding individual first packets in said assembling step;

a determination step of determining whether or not a predetermined flag is contained in the information received in said receiving step; and

a second deletion step of deleting said second packet, stored in said storing step, corresponding to said first packet which is prior to said first packet to which said second packet in which said flag is contained corresponds when said determination step determines that said flag is contained in the information received in said receiving step.

12. (Currently Amended) A program for causing a computer to perform an operation of receiving information, transmitted via a network, for individual second packet which are created by dividing information for individual first packets, said program comprising:

a receiving step of receiving said information transmitted for each of said second packets via said network;

a storing step of storing, for each of said first corresponding first packets, information for each of said second packets received in said receiving step;

an assembling step of assembling information for each of said second packets, stored in said storing step, into information for each of said first packets before being divided;

a first deletion step of deleting each of said second packets, stored in said storing step, corresponding to said assembled information for each of said second packets when each of said second packets is assembled into said corresponding individual first packets in said assembling step;

a determination step of determining whether or not a predetermined flag is contained in the information received in said receiving step; and

a second deletion step of deleting said second packet, stored in said storing step, corresponding to said first packet which is prior to said first packet to which said second packet in which said flag is contained corresponds when said determination step determines that said flag is contained in the information received in said receiving step.